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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	1
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Complete if Known

Application Number	09/817,725
Filing Date	March 26, 2001
First Named Inventor	Olaf B. Kinstler et al.
Art Unit	1648
Examiner Name	Not Yet Assigned
Attorney Docket Number	11009/35975C

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
<i>e</i>	A30	6,027,720	02-22-2000	Kuga <i>et al.</i>	


Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

FOREIGN PATENT DOCUMENTS

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Examiner Signature		Date Considered	1-17-06
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PTO/SB/08a/b (08-03)

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Substitute for form 1449A/B/PTO

**FOURTH INFORMATION
DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)**Complete if Known**

Application Number	09/817,725
Filing Date	March 26, 2001
First Named Inventor	Kinstler <i>et al.</i>
Art Unit	1654
Examiner Name	Billy Dell Chism
Attorney Docket Number	11009/35975C

Sheet	1	of	4
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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
P	A31	3,772,264	11-13-1973	Bayer <i>et al.</i>	
	A32	5,109,120	04-28-1992	Ueno and Fujino	
	A33	5,324,844	06-28-1994	Zalipsky	
	A34	5,589,356	12-31-1996	Tam	
	A35	5,597,797	01-28-1997	Clark	
	A36	5,612,460	03-18-1997	Zalipsky	
	A37	5,646,113	07-08-1997	Attie <i>et al.</i>	
	A38	5,661,122	08-26-1997	Clark <i>et al.</i>	
	A39	5,747,646	05-05-1998	Hakimi <i>et al.</i>	
	A40	5,935,924	10-10-1999	Bunting <i>et al.</i>	
	A41	6,673,347	01-06-2004	Offord <i>et al.</i>	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Country Code ² -Number ³ -Kind Code ⁴ (if known)				
P	B31	JP-62-115280 (equivalent of B20)	05-26-1987	Takeda Chemical Industries Ltd.		
	B32	JP-62-129298 (English language translation included)	06-11-1987	Chugai Pharmaceutical Co. Ltd.		
	B33	JP-62-236488 (English language translation included)	10-16-1987	Chugai Pharmaceutical Co. Ltd.		
	B34	JP-62-236497 (English language translation included)	10-16-1987	Chugai Pharmaceutical Co. Ltd.		
	B35	JP-62-289522 (equivalent of B23)	12-16-1987	Cetus Corp.		
	B36	JP-62-503171 (equivalent of B49)	12-17-1987	Cetus Corp.		
	B37	JP-63-10800 (equivalent of A32)	01-18-1988	Takeda Chemical Industries Ltd.		
	B38	JP-63-126900 (English language translation included)	05-30-1988	Takeda Chemical Industries Ltd.		
	B39	JP-63-500636 (English language translation included)	03-10-1988	Kirin Amgen Inc. (US)		
	B40	JP-63-60938 (English language translation included)	03-17-1988	Meiji Milk Prod. Co. Ltd.		
	B48	DE 29 30 542 (English language translation included)	02-12-1981	Hoechst AG.		
Q	B49	EP 229 108	07-22-1987	Cetus Corp.		
	B50	EP 402 378B	12-19-1990	Cetus Oncology Corp.		
	B51	EP 426 488 B	05-08-1991	Nihon Chemical Research Kabushiki Kaisha also known as JCR Pharmaceuticals Co., Ltd.		
	B52	EP 510 356A	10-28-1992	F. Hoffmann-La Roche AG		
	B53	EP 567 566 A	11-03-1993	Amgen Inc.		

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Substitute for form 1449A/B/PTO FOURTH INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
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				Filing Date	March 26, 2001
				First Named Inventor	Kinstler <i>et al.</i>
				Art Unit	1654
				Examiner Name	Billy Dell Chism
Sheet	2	of	4	Attorney Docket Number	11009/35975C

<input checked="" type="checkbox"/>	B54	JP-5-170796 (English language translation included)	07-09-1993	Sumitomo Pharmaceuticals Company Limited		
	B55	WO 87/00056 (PCT)	01-15-1987	Cetus Corp.		
	B56	WO 90/05534 (PCT)	05-31-1990	Genentech, Inc.		
	B57	WO 92/16221 (PCT)	10-01-1992	Synergen, Inc.		
	B58	WO 93/00109 (PCT)	01-07-1993	Genentech, Inc.		
	B59	WO 94/12219 (PCT)	06-04-1994	Synergen, Inc.		
	B60	WO 95/00846 (PCT)	01-05-1995	TAM, James P.		
<input checked="" type="checkbox"/>	B61	WO 95/32003 (PCT)	11-30-1995	Amgen Boulder Inc.		


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NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ²
<input checked="" type="checkbox"/>	C24	CRC Standard Mathematical Tables, 26 th ed., (Beyer, W.H., Ed.) CRC Press, Inc. Boca Raton, FL, 1981, p. 125				
	C26	FILGRASTIM Clinical Practice, Morstyn, G. and T.M. Dexter, Eds., Marcel Dekker Inc., New York, NY (1993), p.351				
	C55	ACHARYA <i>et al.</i> , <i>J. Biol. Chem.</i> , "Schiff Base Adducts of Glyceraldehyde with Hemoglobin", 258(4): 2296-2302 (1983)				
	C56	ACHARYA <i>et al.</i> , <i>J. Biol. Chem.</i> , "Reductive Hydroxyethylation of Hemoglobin A", 258(22): 13761-13767 (1983)				
	C57	ACHARYA <i>et al.</i> , <i>J. Biol. Chem.</i> , "Selectively in the Modification of the α -Amino Groups of Hemoglobin on Reductive Alkylation with Aliphatic Carbonyl Compounds", 260(10): 6039-6046 (1985)				
	C58	BENHAR <i>et al.</i> , <i>J. Biol. Chem.</i> , "Pseudomonas Exotoxin A Mutants: Replacement of Surface-Exposed Residues in Domain III with Cysteine Residues that can be Modified with Polyethylene Glycol in a Site-Specific Manner", 269(18):13398-13404 (1984) Issue of May 6 Received 8/26/93				
	C59	BERGER and PIZZO, <i>Blood</i> , "Preparation of Polyethylene Glycol-Tissue Plasminogen Activator Adducts that Retain Functional Activity: Characteristics and Behavior in Three Animal Species", 71(6)(June):1641-1647 (1988)				
	C60	BRYGIER <i>et al.</i> , <i>Applied Biochemistry and Biotechnology</i> , "Covalent Attachment of Poly(ethyleneglycol) of Peptides and Proteins", 42:127-135 (1993)				
	C61	CUNICO <i>et al.</i> , <i>J. Chromatography</i> , "Characterization of polyethylene glycol modified proteins using charge-reversed capillary electrophoresis", 559:467-477 (1991)				
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	C63	DELGADO <i>et al.</i> , <i>J. Biochem. Biophys. Methods</i> , "Quantitative analysis of polyethylene glycol (PEG) in PEG-modified proteins/cytokines by aqueous two-phase systems", 29:237-250 (1994)				
<input checked="" type="checkbox"/>	C64	DIDONATO <i>et al.</i> , <i>J. Biol. Chem.</i> , "Selective Carboxymethylation of the α -Amino Groups of Hemoglobin", 258(19): 11890-11895 (1983)				

Examiner Signature		Date Considered	1-18-06
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Substitute for form 1449A/B/PTO FOURTH INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	09/817,725
				Filing Date	March 26, 2001
				First Named Inventor	Kinstler et al.
				Art Unit	1654
				Examiner Name	Billy Dell Chism
				Attorney Docket Number	11009/35975C
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9	C65	EHRAT and LUISI, <i>Biopolymers</i> , "Synthesis and Spectroscopic Characterization of Insulin Derivatives Containing One or Two Poly(ethylene oxide) Chains at Specific Positions", 22:569-573 (1983)	
	C66	FRANCIS et al., <i>Biomedicine and Pharmacotherapy</i> , "PEG-Cytokines: Improved Pharmaceutical Properties and Dissociation of Individual Bioactivities", 46(5-7):305 (Abstract 133) (1992)	
	C67	HARRIS and WISER, American Chemical Society, "Characterization of products formed from reaction of polyethylene glycol acetaldehyde with various bases", 201st National Meeting, Atlanta, GA, April 14-19, 1991, Abstracts Part 2, Abstract 78	
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	C70	JIANG and DALTON, <i>Biochimica et Biophysica Acta</i> , "Chemical modification of the hydroxylase of soluble methane monooxygenase gives one form of the protein with significantly increased thermostability and another that functions well in organic solvents", 1201:76-84 (1994)	
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	C72	KATRE, <i>J. Immunol.</i> , "Immunogenicity of Recombinant IL-2 Modified by Covalent Attachment of Polyethylene Glycol", 144(1):209-213 (1990)	
	C73	KITA et al., <i>Drug Design and Delivery</i> , "Characterization of a Polyethylene Glycol Conjugate of Recombinant Human Interferon- γ ", 6:157-167 (1990)	
	C74	KOIDE and KOBAYASHI, <i>Biochem. and Biophys. Res. Commun.</i> , "Modification of Amino Groups in Porcine Pancreatic Elastase with Polyethylene Glycol in Relation to Binding Ability Towards Anti-Serum and to Enzymic Activity", 111(2):659-667 (1983)	
	C75	KNAUF et al., <i>J. Biol. Chem.</i> , "Relationship of Effective Molecular Size to Systemic Clearance in Rats of Recombinant Interleukin-2 Chemically Modified with Water-soluble Polymers", 263(29):15064-15070 (1988)	
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	C80	LU and FELIX, <i>Peptide Research</i> , "Pegylated Peptides I: Solid-phase Synthesis of N ^α -pegylated Peptides Using Fmoc Strategy", 6(3):140-146 (1993)	
	C81	LU and FELIX, <i>Int. J. Peptide Protein Res.</i> , "Pegylated Peptides II: Solid-Phase Synthesis of Amino-, Carboxy- and Side-chain Pegylated Peptides", 43:127-138 (1994)	
	C82	MALIK et al., <i>Exp. Hematol.</i> , "Polyethylene glycol (PEG)-modified granulocyte-macrophage colony-stimulating factor (GM-CSF) with conserved biological activity", 20:1028-1035 (1992)	
	C83	NATHAN et al., <i>Bioconjugate Chem.</i> , "Copolymers of Lysine and Polyethylene Glycol: A New Family of Functionalized Drug Carriers", 4:54-62 (1993)	
10	C84	NEUBAUER et al., <i>Diabetes</i> , "Influence of Polyethylene Glycol Insulin on Lipid Tissues of Experimental Animals", 32:953-958 (1983)	

Examiner Signature		Date Considered	1-19-06
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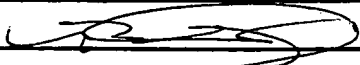
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		Art Unit	1654
		Examiner Name	Billy Dell Chism
Sheet 4 of 4	Attorney Docket Number	11009/35975C	

<input checked="" type="checkbox"/>	C85	NHO <i>et al.</i> , Chpt. 12 in Poly (Ethylene Glycol) Chemistry: Biotechnical and Biomedical Applications, "PEG-Modified Hemoglobin as an Oxygen Carrier", Harris, Ed., Plenum Press, New York (1992) pp. 171-182	
<input type="checkbox"/>	C86	NUCCI <i>et al.</i> , <i>Adv. Drug Delivery Rev.</i> , "The therapeutic value of poly(ethylene glycol)-modified proteins", 6:133-151 (1991)	
<input type="checkbox"/>	C87	PEDDER, <i>Seminars in Liver Disease</i> , "Pegylation of Interferon Alfa: Structural and Pharmacokinetic Properties", 23(Suppl. 1):19-22 (2003)	
<input type="checkbox"/>	C88	PETTIT <i>et al.</i> , <i>J. Biol. Chem.</i> , "Structure-Function Studies of Interleukin 15 using Site-specific Mutagenesis, Polyethylene Glycol Conjugation, and Homology Modeling", 272(4):2312-2318 (Jan. 24, 1997)	
<input type="checkbox"/>	C89	POZNANSKY and JULIANO, <i>Pharmacological Reviews</i> , "Biological Approaches to the Controlled Delivery of Drugs: A Critical Review", 36(4):277-336 (1984)	
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<input type="checkbox"/>	C92	TRUITT <i>et al.</i> , <i>Proc. Amer. Assoc. Cancer Res.</i> , "Pharmacodynamic and preliminary pharmacokinetic evaluation of pegylated derivatives of interferon- α 2a", 35:398 (Abstract 2370) (March 1994)	
<input type="checkbox"/>	C93	WANG <i>et al.</i> , <i>Cancer Research</i> , "Polyethylene glycol-modified chimeric toxin composed of transforming growth factor α and <i>Pseudomonas</i> Exotoxin", 53:4588-4594 (1993)	
<input type="checkbox"/>	C94	WATSON <i>et al.</i> , <i>Biotechniques</i> , "Matrix-Assisted Laser Desorption Mass Spectrometric Analysis of a Pegylated Recombinant Protein", 16(2):278-280 (1994)	
<input type="checkbox"/>	C95	YAMASAKI <i>et al.</i> , <i>J. Biochem.</i> , "Modification of Recombinant Human Granulocyte Colony-Stimulating Factor (rhG-CSF) and Its Derivative ND 28 with Polyethylene Glycol", 115:814-819 (1994)	
<input type="checkbox"/>	C96	YOSHINAGA <i>et al.</i> , <i>J. Bioactive and Compatible Polymers</i> , "Effects of Polyethylene Glycol Substitution on Enzyme Activity", 2:49-56 (1987)	
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